THE INTELLECTUAL AND LEADERSHIP CENTER OF THE AIR FORCE We make a difference, one student at a time.

Academic Year (AY) 2006

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RESEARCH BULLETIN

Air University Commander's Welcome

By Lt Gen Stephen R. Lorenz

Air University (AU) exists for the benefit of the Air Force and the nation. Its mission is to provide the full spectrum of Air Force education—from pre-commissioning to the highest levels of professional military education (PME), including degreegranting and professional continuing education for officers, enlisted and civilian personnel. The university's PME programs educate Airmen and its other joint, civilian and international students on the capabilities and national security roles of air, space and cyberspace power. They focus on the knowledge and skills needed to develop, employ and command air, space and cyber power at the highest levels. As part of this educational process, AU conducts relevant, responsive and forward-thinking research in the global war on terror, homeland defense, force development, intelligence, technology, strategic cyberspace as well as history and lessons learned.

Each year, I ask senior leaders within the Department of Defense, Air Force, major commands, combatant commands, sister services and the interagency to provide AU with topics that are of interest to them, their commands and the broader national security community. This year I received more than 300 prioritized research topics from which AU in-residence colleges built their Academic Year (AY) 2007 research agendas. Students of the Air War College (AWC), Air Command and Staff College (ACSC) and School of Advanced Air and Space Studies (SASS), along with the 59 Air Force Fellows (AFF), assigned to leading civilian universities and think tanks, are currently researching many of these topics.

This seventh AU *Bulletin* annual edition covers AY 2006, which ended in June. Overall, AU PME students generated more than 150 high quality research products that met or exceeded their institutions' standards for publication or posting on the internet. This *Bulletin* includes highlights of the research contributions of the Air University's military and civilian faculty. For the first time, titles are organized by topical categories (as listed under "Contributions by AU Faculty and Graduates" within the contents insert, at left).

AU Research Bulletin — AY 2006

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The AU Research *Bulletin* is distributed throughout the national security community in print form and is also available electronically at https://research.maxwell.af.mil or https://research.airuniv.edu

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AU Research Overview

Research at Air University

By Gen John A. Shaud (Ret), AU Dean of Research

Our goal for research at AU is to be the premier source of advanced air, space and cyberspace research for the United States Air Force. At AU, we are engaged in taking on the significant issues that challenge the Air Force now and in the future with outstanding faculties, students and professional researchers on our campus at Maxwell AFB as well as the Air Force Institute of Technology at Wright-Patterson AFB (WPAFB).

These sets of professionals bring together academic credentials in science, technology and the arts coupled with combat experience in military aviation that is unparalleled anywhere else in the world. They bring in many unique air, space and cyberspace experiences that contribute immensely to the quality of AU's research.

Our primary objective in publishing the annual AU Research *Bulletin* is to recognize the best of these research accomplishments. Accordingly, we highlight faculty and student research, the latest AU Press publications and the activities of AU's specialized research centers.

The publication's goal is to foster communication about a broad range of matters related to research at AU. It is also designed to help promote increased recognition of an important dimension of AU's service to the Air Force and the rest of the defense community.

AFIT Research Program

By Dr. Heidi R. Ries, PhD, AFIT Dean for Research

Research at AU includes both technological research, undertaken primarily at the Air Force Institute of Technology at WPAFB in Dayton, Ohio and research on doctrine, strategy and the art of war conducted at the schools at Maxwell AFB, Alabama.

Research accomplishments of AFIT's faculty and resident graduate students at WPAFB are reported separately from this AU Research *Bulletin* in annual *AFIT Research Reports*, departmental *Research Activities Brochures* and in the AFIT Graduate School of Engineering and Management *Research News*. Electronic versions of these publications are available at http://en.afit.edu/enr/, and questions may be addressed to research@afit.edu.

CADRE's Airpower Research Institute (AY 2006)

By Col Michael D. Davis, Director

CADRE's Airpower Research Institute (ARI) advances the theory and application of air, space and cyberspace power through research, analysis, publication and education. ARI focuses on a single, overriding objective: contributing as warrior-scholars to an improved combat capability for the USAF. In support of that objective, we perform a number of missions. First, we produce books and original research pamphlets, papers and briefings related to air, space and cyberspace. Second, ARI facilitates the research of students and faculty throughout the Air University school system by managing the AU Commander's Research Board process, the annual Call for Topics and associated research database and websites. With the support of the AR electronic journals division, the research support division also publishes the AU Bulletin and electronically posts numerous faculty/student research papers. Third, we manage and publish the Air Force's flagship publication, the Air and Space Power Journal (ASPJ). The ASPJ is our professional quarterly journal and primary institutional forum for exchanging ideas about airpower and other matters relating to national defense—published in five languages (English, Arabic, French, Spanish and Portuguese; expanding to Chinese in 2007) and distributed to more than 90 countries, worldwide. In addition, we supplement ASPJ with the Chronicles Online Journal, an electronic Internet journal, in its own right. Fourth, we are home to the administration and oversight of the Air Force Fellows program—sending out approximately 60 board-selected field grade officers to civilian universities and "think tanks" throughout the United States and England. Through these resources, programs and services, CADRE's Airpower Research Institute generates and delivers high quality intellectual throw weight in the key areas of research, research support, information operations and education. In this respect, it joins the other AF research centers by providing both a stimulus for original research and multiple venues for disseminating and sharing key air, space and cyberspace power ideas.

The CADRE Papers, ARI Papers and Quick Looks

By Dr. Daniel Mortensen, ARI Chief of Research

CADRE Papers, ARI Papers and Quick Looks are occasional publications sponsored by CADRE's Airpower Research Institute. All are dedicated to promoting

AU Research Overview

understanding of air, space and cyberspace power theory, doctrine and application. *CADRE Papers* are published by AU Press; *ARI Papers* and *Quick- Looks* by CADRE's ARI directorate. Studies from all series are broadly distributed to the USAF, the Joint Staff and Joint Commands, DOD and other governmental organizations, sister-service PME schools, selected universities, military and civilian think tanks and leading scholars. All publications are available on the AU Research Web at https://research.au.af.mil/ or https://research.airuniv.edu.

An older *CADRE Paper* series (1985-90) is available on this electronic site, as is the revived series starting in 1998. The current series is also generally available in hard copy from the AU Press.

All faculty and students assigned to AU, as well individuals throughout the Air Force, are invited to submit unclassified manuscripts to ARI for publication consideration. Manuscripts should pertain to USAF/airpower doctrine, strategy, concepts of operations and items of particular interest to the leadership of the Air Force and other primary decision makers.

Four new *CADRE Papers* have been published in Academic Year 2006:

GPS versus Galileo, Balancing for Position in Space, by Lt Col Scott W. Beidleman

Military Chaplains as Peace Builders, Embracing Indigenous Religions in Stability Operations, Chaplain (Col) William Sean Lee, Lt Col Christopher J. Burke and Lt Col Zonna M. Crayne

Understanding Islam and Its Impact on Latin America, Lt Col Curtis C. Connell

Flying Reactor; The political Feasibility of Nuclear Power in Space, Lt Col James R. Downey, Wing Cdr Antony M. Forestier and Lt Col David E. Miller

Research and Publication Opportunities

The Air Staff and Senior AF Leaders Commission the ARI Papers

Originally conceived to provide independent analysis of a wide range of issue related to airpower theory, doctrine and employment, the *ARI Papers* now emphasize Concepts of Operations as well. The purpose of the papers is to provide research products that will underwrite mature decision-making by the Air Force and joint warfighters, as well as support education, doctrine development and research at AU.

Two ARI Papers have been published in Academic Year 2006.

- 1. The Evolution of Time Sensitive Targeting: Operation Iraqi Freedom Results and Lessons, Lt Col John M. Fyfe
- The Paradigm Shift to Effects-Based Space: Near-Space as a Combat Space Effects Enable, Lt Col Edward B. Tomme, D.Phil.

New Research and Publication Tools: Quick Looks and Blue Darts

Air University produces two types of short impact papers. The first, used mostly by staff researchers assigned to ARI, are one- to two-page papers, called *Quick* Looks (QLs). QLs help analysts and researchers conceptualize their ideas. With selective distribution, they gain feedback to guide continuing research. These short products are written early in the writing process and follow an established formula: they identify a problem or issue, provide a short historically-based background type discussion and they provide actionable recommendations in bullet format. Supplementing QLs, but written at the completion of a research project or paper, are Air University Blue Darts (BDs). BDs are written in the style of an opinion/editorial (OpEd) piece—to pass along one's opinion and to entice readers to follow up by reading the completed research paper, article, or book. BDs are limited to 750 words and targeted to the greater media audience. Beginning this academic year at AU, the AU/CC has directed that all research submissions greater than 19 pages in length, including student papers, will be accompanied by a publishable *Blue Dart*.

AY 06 Continues the Walker Series Research Paper Awards

By Ms. M. Dee Taylor, Chief, Air Force Fellows

Each of this year's AY 2005-2006 Air Force Fellows (AFF) had a major impact on the military, academia and industry as well as the executive and legislative branches of government. In their role as military ambassadors to their respective institutions, the Fellows skillfully provided defense insights on a wide spectrum of critical national security policy, cutting edge technology or doctrinal issues. Their involvement included:

- Participating in national security forums and working groups
- Providing media interviews, lectures and speeches,
- Hosting seminars, workshops and war games.

AU Research Overview

Air Force Fellows also had unique access to senior civilian and military leaders across the globe. This enabled them to increase their national security policy or DOD/Air Force doctrinal expertise in addition to the opportunity to broaden their leadership skills while championing Air Force capabilities and influencing future policy initiatives across all services. Finally, their professionalism and dedication greatly strengthened defense partnership with the academic, industry and policy communities.

In addition to their intra- and extra-institutional involvement, each AFF also conducted cutting-edge research on issues vital to national security, impacting the implementation of doctrine as well as future questions relating to the fast pace of technology development inside and outside the DOD. Their research represents significant scholarly advancement of thought on crucial defense policy and strategy developments. Furthermore, their evaluation of processes and policy is invaluable to future US national security issues. Finally, Fellows were also instrumental in furthering work undertaken by prestigious private research institutions, academic institutions and industry organizations such as RAND, the Brookings Institution, the Weatherhead Center for Strategic and International Studies, Harvard and Sun Microsystems, Raytheon and Johnson & Johnson.

As in the past, the 2007 AFF program will honor the top three research papers with the coveted Walker Series award. The Walker Series is dedicated to Brigadier General Kenneth Walker and recognizes the contributions each Fellow has made to research supporting air and space power and its use in the implementation of US strategic policy and cutting edge research in the areas of futures technologies. The 2005-2006 Walker Awards winners were:

US Security Cooperation in Central Asia: Options for the Future

By Lt Col Michael J. McCarthy AFF, Centre for International Relations (QCIR), Queens University, Ontario Canada

> Recapitalizing Air Force Nuclear Weapons

By Lt Col Edgar M. Vaughan AFF, Los Alamos National Laboratory, Air Force National Laboratories Technologies Fellowship, Los Alamos NM

> Engaging Russia on Missile Defense

By Lt Col Jeffrey T. Butler AFF, Institute for the Study of Conflict, Ideology and Policy (ISCIP), Boston University, Boston MA The research technology team at CADRE posts student papers and publications to the AU Research Web. In order to better serve the community, a SIPRNET site for classified research is located at http://research.maxwell.af.smil.mil/. During this current academic year, we will establish a restricted site that will allow AU to immediately post of all unclassified papers that satisfy the school's standards. When the papers are cleared by a security and policy review they can also be posted to the public research web site. I encourage you to visit that site and its archives, which contains over 2,600 research studies consisting of papers, monographs and books—the best of AU research!

The activity on our Research Web site indicates that it is busiest from Monday through Friday during the hours of 0800-1600 daily and that our users are gaining access primarily through commercial domains. However, military domains still have the largest number of hits. Googlebot.com is most used Internet service allowing users to access the Research Web service and those with an af.mil address are second. We have experienced a total of 155,664 hits during the past academic year on the Research Web. while the associated Chronicles Online Journal has experienced over 15 million hits. As such, AU research and publication is an important source of information, education and air. space, and cyberspace influence.



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Ms. Catherine Parker

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AU Research Website Top 15 Papers Downloaded

During AY 2006, the AU Research Web site served up 170,000+ PDF files for our research community. Below are the top 15 papers downloaded during the year.

| Top 15 Downloaded Files | | | |
|-------------------------|-----------------|---|------------|
| | School / Year | Title / Author | Downloaded |
| 1 | AFIT / 2003 | Multimission Aircraft Design Study, Payload By Ahmet Kahraman | 17,898 |
| 2 | AFIT / 2002 | Decision Analysis with Value Focused Thinking as a Methodology to Select Force Protection Initiatives for Evaluation By David M. Jurk | 17,670 |
| 3 | AWC / 2002 | Beyond the Task Force Conops: The Path to a Capabilities-Based Modernization Framework for the Air Force By James Planeaux | 17,076 |
| 4 | AFIT / 2002 | Nonlinear Suppression of Range Ambiguity in Pulse Doppler Radar By Jon M. Anderson | 15,454 |
| 5 | AFIT / 2004 | Study of a skirtless hovercraft design By Kyle P. Malone, Ensign, USNR | 15,444 |
| 6 | CADRE / 2002 | Thunder and Lightning Desert Storm and the Airpower Debates By Edward C. Mann III | 14,744 |
| 7 | AFIT / 2003 | Modeling Homeland Security: A Value Focused Thinking Approach By Kristopher Adam Pruitt | 14,186 |
| 8 | SAAS / 2000 | US Military Aircraft for Sale: Crafting an F-22 Export Policy By Matthew H. Molloy | 13,489 |
| 9 | AFIT / 2003 | Tightly-Coupled Image-Aided Inertial Navigation System via a Kalman Filter By Michael G. Giebner | 12,112 |
| 10 | SAAS / 2003 | Airpower Versus Terrorism: Three Case Studies By Maj Todd R. Phinney, USAF | 12,040 |
| 11 | AFIT / 2002 | Alternative Pulse Detonation Engine Ignition System Investigation Through Detonation Splitting, By August J. Rolling | 9,327 |
| 12 | AFIT / 2003 | Gaussian Mixture Reduction for Tracking Multiple Maneuvering Targets in Clutter, By Jason L. Williams | 9,206 |
| 13 | AU Press / 2004 | A-10s over Kosovo By Christopher E. Haave and Phil M. Haun | 9,122 |
| 14 | AFIT / 2001 | Three-Dimensional Dynamic Stress Analysis of Sandwich Panels By Victor Y. Perel | 8,830 |
| 15 | AFIT / 1997 | Core Values: A History of Values-related Initiatives in the Air Force By Gregory J. Dierker | 8,708 |
| | | Sub Total | 195,306 |
| | | Total Files Downloaded during AY | 1,241,973 |

Contributions by AU Faculty

Global War on Terror, Homeland Defense, and Other Current Issues

Produced by/Sponsored by/Publication Venue

Al Qaeda's Targeting Modus Operandi

By Barry Schneider

AWC, CPC

Dying to Prove a Point: The Methodology of Dying to Win

By James Kiras

SAASS, "Journal of Strategic Studies," Vol 2

Special Operations and Strategy: From World War II to the War on Terrorism

By James Kiras

SAASS, London: Routledge

Suicide Terrorism: Martyrdom for Organizational Objectives

By James Winkates

AWC, Journal of Third World Studies

US Special Operations Forces, Transformation and its Implications for Canadian Special Operations Doctrine

By James Kiras

SAASS, McGill-Queens University Press

From Cold War to Long War: Continuity and Adaptation

By Col Michael Davis *CADRE (TWS)*

Warfighting and Operational Issues

Produced by/Sponsored by/Publication Venue

Airpower Realities

By Everett C. Dolman

SAASS, Praeger Security Intl

Background on Future Bomber Development

By Larry Carter

CADRE, Air Staff

Making Moral Targeting Decisions in War: The

Importance of Principal Agent Motivation Alignment and Constraining Doctrine

By Tomislav Z. Ruby

ACSC, Journal of Military Ethics

The Next Phase: Air and Space Power in Effects-Based Termination Campaigns,

By Anthony C. Cain

ACSC, The Wright Stuff (TWS)

Perspective: Airpower in Counterinsurgency Operations

By Anthony C. Cain

ACSC, The Wright Stuff (TWS)

Force Development

Produced by/Sponsored by/Publication Venue

A History of US Military Uniforms

By Alex Wathen, et al

CADRE, CSAF

Heterogeneous Engineering and JPATS: Leadership, Logic and Acquisition Requirements

By Stephen Chiabotti

SAASS, Eaker College Book of Leadership (AU Press)

Ideas as Institutions: Explaining the Air Force's Struggle with its Aerospace Concept

By Stephen Rothstein

SAASS, Fletcher School of Tufts University & SAASS

The Volunteers of 1941: The Pennsylvania National Guard and Continuity in American Military Policy

By Michael Weaver

ACSC, Pennsylvania History, Vol 72

Intelligence, Technology, and Combat Support

Produced by/Sponsored by/Publication Venue

Air Force Aircraft Recapitalization and Aging Study

By Alex Wathen et al

CADRE, CSAF

Eliminating Functional Stovepipes: Process Organizing the Air Force Logistics Readiness Squadron

By Maj Christopher Holmes

ACSC

Technology Transition: A More Complete Picture

By Col John Wissler

AWC, Defense Acquisition Journal

US Military Transformation and Weapons in Space

By Everett C. Dolman

SAASS, The SAIS Review, Vol XXVI, Johns Hopkins

Strategy, Strategic Planning, and Security Studies

Produced by/Sponsored by/Publication Venue

The Afghan Model in Northern Iraq

By Richard Andres

SAASS, Journal of Strategic Studies, Vol 29, SOCOM & US European Command

Analysis of Key West Agreement as Pertinent to— Reengagement

By Robyn Read, et al *CADRE*, *SAF/OS*

China's 1979 War with Vietnam: A Reassessment

By Xiaoming Zhang

AWC, China Quarterly

The Environment, the US Military and Southern Africa

By Dan Henk

AWC, Parameters

Kaximerz Sosnkowski as Commander in Chief: The Government in Exile and Polish Strategy, 1943-1944

By Dr. Matthew R. Schwonek

ACSC, The Journal of Military History, Vol 70

Restraint, Impartiality, Legitimacy: State-Building and the US Army

By Dr. Edwina S. Campbell and Dr. Tony R. Mullis ACSC, Published as "Von Kansas in den Irak," Das Parlament

Seeking Clocks in the Clouds: Nonlinearity and American Precision Air Power

By G. Scott Gorman *SAASS*, *SAASS*

Strategy Lost: Taking the Middle Road to Wherever

By Everett C. Dolman

SAASS, High Frontier, Vol 1 & AF Space Command

United States v. North Korea in No-Limit Poker: Alligator Blood or Dead Money?

By David Lai and Lt Col Wade Smith AWC, Korean Journal of Defense Analysis

US-India-China: Assessing Tripolarity

By Amit Gupta *AWC*, *China Report*

Vietnam Three Decades after Saigon's Fall

By Lawrence Grintner *AWC*, *Asian Survey*

Winning with Allies: The Strategic Value of the Afghan Model

By Richard B. Andres SAASS, International Security, Vol 30, SOCOM, US European Command

Doctrine, Air, Space and Cyberspace Power; History and Lessons Learned

Produced by/Sponsored by/Publication Venue

Airborne Command Post (ABNCP) Celebrates 45th Anniversary

By Richard Hughes

ACSC, Air and Space Power Journal

Austria Between Mussolini and Hitler: War by Other Means

By Alexander Lassner

AWC, Contemporary Austrian Studies

Bringing States Back In: Thinking About Great Powers and War

By James Forsyth

ACSC, Foreign Affairs

Defence of the Reich: The Luftwaffe over Germany,

By Richard Muller

SAASS, In Production – (Greenhill, London, 2006)

"Drifting Toward Defeat: The French Air Force in the 1930s" in Robin Higham and Stephen Harris, eds.,

Why Air Forces Fail: The Anatomy of Defeat

By Anthony C. Cain

ACSC, University of Kentucky Press

Geographic Pivot of Outer Space

By Everett C. Dolman

SAASS, "The Geographic Pivot of History: Halford Mackinder and the Defense of the West"

A Hot Day in a Cold War: An RB-47 versus Mig-17s, April 28, 1965

By Col Forrest Marion AWC, Air Power History

The Lessons of September 11th, Iraq and the American Pendulum

By Chris Hemmer

AWC, Political Science Quarterly

Muslims Demographics in the European Union: Widening the Gap with US Foreign Policy

By Maj Leon Perkowski *ACSC*

Principles of War in the Joint Fight

By Robyn Read *CADRE, SAF*

Reasoning by Analogy: The Application of Classical Geopolitical Thought to Air and Spacepower Applications

By John Sheldon

SAASS, Reading University

Review of Robin Highman and Stephen Harris, Why Air Forces Fall

ny Air Forces Faii

By Richard Muller

SAASS, US Naval Institute Press

Service within a Service, Discussion of Airpower in Each Service

By Robyn Read, et al *CADRE*, *SAF/OS*

History as a Blueprint: Using the Lessons of the Philippines to Win in Iraq

By Maj Robert Rowell

ACSC

Luftwaffe lessons learned during the Stalingrad Airlift; has the USAF Really Learned

By Maj David Lenderman *ACSC*

Deep Attack against Iraq: Precision Weapons, Cyber Attack and the Future of War

By Richard B. Andres

SAASS, Book Chapter in Eliot Cohen and Thomas Keaney's eds., "Military Operations in Iraq" (Routledge 2006)



Contributions by Graduates

Global War on Terror, Homeland Defense, and Other Current Issues

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Air Force's Contribution to GWOT, Detainee Operation Mission "Commanders Reflections"

By Lt Col Joseph L. Romano, III

AFF, Institute for Defense Analyses (IDA)

Airpower Against Irregular Adversaries: How Terrorist, Insurgent and Guerrilla forces have Attempted to Negate Airstrikes

By Charles J. Wallace, II SAASS, INSS

Analysis of USAF Counter-Chemical Weapons Concept of Operations Relative to Alternative Delivery Methods and Fourth Generation Chemical Warfare Agents

By Col Stephen Shea

AWC, USAF Counterproliferation Center

Close Air Support for Counterinsurgency (COIN): An Analysis of Aircraft Requirements

By Maj Charles Havasy *ACSC. SOCOM*

Combating Terrorism in Southeast Asia: Applying an Anti-Communist Counterinsurgency Successes in Southeast Asia to Countering Radical Islamic Terrorism

By Col Thomas Tatum *AWC*, *Air University*

Containerizing the WMD Threat: A Role for Unmanned Aircraft Systems

By Lt Col William Hampton

AWC, USAF Counterproliferation Center

Defeating A Genocide: An Operational Concept

By Maj Keith Reeves *ACSC, Air University*

The Department of Defense and Civil Support: Preparing for the Big Game

By Lt Col Raymond Descheneaux,

AWC, Air University

Enhancing USAF Air Base Defense: Capturing the Lessons from Vietnam and Current Operations in Iraq

By Lt Col John Ziegler

AWC, USAF Counterproliferation Center

Fighting the Huks: Lessons Learned from a Successful Counter-Insurgency Program

By Maj Ben Edwards *ACSC*, *SOCOM*

Heads Not Tails: How Best to Engage Theater Ballistics Missiles

By Col Ronald Wiegand *AWC*, *Air University*

Iran's Youth Bulge and Its Implications for US National Security

By Maj Brendan Harris

ACSC. INSS

Measured-Response Analysis of DOD CBRN Capabilities for a Domestic WMD Incident

By Col Frederick Pellissier

AWC, USAF Counterproliferation Center

A Mile in Their Shoes: Know the Enemy

By Maj Jeffrey Simpson

ACSC, INSS

Minefields in the Caribbean: A Region Vectored to Becoming Failed States

By Maj Orville Reid

ACSC, Air University

Missile Defense: A Blip in US-China Relations

By Lt Col Franklin Hinson AWC, Center for Asian Studies

Muslim Demographics in the European Union: Widening the Gap with US Foreign Policy

By Maj Leon Perkowski

ACSC, INSS, US European Command

The New Air Commando: Smart Transformation of Combat Aviation Advisory Forces

By Maj Joshua Burgess *ACSC*, *SOCOM*

The New Cold War: Radical Islam in Southeast Asia

By Maj Kelvin Gardner

ACSC, INSS

An Operational Level Analysis of DOD's Strategic Mobility and Logistics Support to the Homeland Security Architecture

By Lt Cols James Hamilton and Paul Murphy *AWC*, *USAF Counterproliferation Center*

Pandemic Influenza: Military Operational Readiness Implications

By Maj Gerald Hesko

ACSC, INSS

Progress in War on Terror

By Maj Israel Harden

ACSC, Joint Chiefs of Staff

Provincial Reconstruction Teams (PRTs): Vietnam's Provincial Advisor Teams Revisited?

By Maj Christoff Gaub *ACSC*, *Air University*

The Role of the Armed Forces in Indonesia: Aiding Stability in a Fledgling Democracy

By Maj Michael Mote

ACSC, INSS

The Shadow of the Future: Infidel and Apostate-Government Cooperation in the War on Terror

By Wayne Straw SAASS, AETC & INSS

Shaping the Homeland Security Information

Environment: Framing a Network Centric Enabled Operations Center within DHS

By Col Dionysios Anninos *AWC, Air University*

Suicide Bombing: The Organization Motivation Behind the Destruction

By Maj David Lyons SAASS, Air University

Terrorism and the Jordanian Approach

By Col Yousef Alhnaity AWC, Air University

Terrorism vis-à-vis Traditional Clausewitzian Concepts of War

By Col John M. Hicks AFF, The Washington Institute

Transcendental Terrorism and Dirty Bombs: Radiological **Threats Revisited**

By CDR Chad Brown

AWC, Office of Naval Intelligence

Transforming Information Services for a Secure Future

By Maj Scott Stormo ACSC, HQ AF/XI

The Use of Airpower in the War against Palestinian **Terrorism**

By Lt Col Ariel Brikman AWC, Air University

Utilizing the National Guard to Optimize Unmanned Aircraft use in Homeland Security

By Lt Col Kimberly Baumann AWC, USAF Counterproliferation Center

What Should Be DOD's Role in Strategic Communication in the War on Terrorism

By Lt Col Daniel G. Putbrese AFF, Atlantic Council of the United States

Warfighting and Operational Issues Produced by/Sponsored by

Afghanistan: The US Military in Stability and Reconstruction

By CDR Becky Roberts AWC, Center for Asian Studies

The Army's Future Force and Airlift Requirements: Can the Army Achieve Its Mission? Can the Air Force Make It So?

By Lt Col Scott Hill and Col Christopher Trouve AWC. TRADOC

Bridgehead: Expeditionary Lessons for a Transformation

By Lt Col Paul Bauman SAASS, INSS

Breaking the Code: Maximizing Mobility Capability and **Reducing Stress in the AEF Construct**

By Lt Col Robert Dague AWC, Air Mobility Command

C2 of Distributed ISR

By Maj Kimberly Joos ACSC, ACC and USEUCOM

Child Soldiers: Are US Military Members Prepared to **Deal with the Threat?**

By Lt Col Judith Hughes AWC, Air University

Coalition Warfare: A Model for Divergent Capabilities

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ABNCP Airborne Command Post

ACDIS Arms Control Disarmament & International Security

(University of Illinois at Urbana-Champaign)

ACSC Air Command and Staff College (Air University)

AFF Air Force Fellows

AFIT Air Force Institute of Technology (Wright-Patterson AFB)

ANG Air National Guard

AWC Air War College (Air University)

CADRE College of Aerospace Doctrine, Research and Education (Air University)

COIN Counterinsurgency

CPC Counterproliferation Center (within Air University's Air War College)
CSAT Center for Strategy and Technology (within Air University's Air War College)

DARPA Defense Advanced Research Projects Agency

FDT Foreign Affairs, Defense Trade Division (Library of Congress, Washington DC)

FIU Florida International University

GWOT Global War on Terrorism

IDA Institute of Defense Analyses (Alexandria VA)

INSS Institute of National Security Studies (USAF Academy CO)

ISCIP Institute for the Study of Conflict, Ideology, and Policy (Boston University)

ISD Institute for the Study of Diplomacy

J5 Joint Staff, Plans Division

JFCOM Joint Forces Command (Norfolk VA)

MIT Massachusetts Institute of Technology

NCO Network Centric Operations

PIRP Program on Information Resources Policy (Harvard)

PLA Palestine Liberation Army

QCIR Center for International Relations, Queens University

SAAS School of Advanced Air and Space Studies (Air University)
SF&RD Strategy, Forces and Resources Division (IDA, Alexandria VA)

SOCOM Special Operations Command SSP Security Studies Program (MIT)

STRIACC Strategic Interagency Coordination Center

SAIS School of Advanced International Studies (Johns Hopkins)

TRADOC Training and Doctrine Command (US Army)

TWS The Wright Stuff (Air University)

USEUCOM United States European Command USAFE United States Air Force Europe

USNC United States Navy War College (Newport RI)

USAFA United States Air Force Academy (Colorado Springs CO)

WCFIA Weatherhead Center for International Affairs (Harvard)

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Each year the AU commander invites senior DOD, Air Force, sister service and interagency leaders to propose research topics for the incoming classes at AU. This report seeks inform AU research sponsors of the research that was accomplished in response to their topics, direct them to where they can review that research and, then, solicit their feedback. Those papers can be found online at the sites listed below.

AU research is published online at the AU Research Web (https://research.maxwell.af.mil) as soon as it is cleared for public release. It is organized to facilitate finding products related to a given topic or provided by a particular contributor. Some papers may relate to more than one topic and may appear in more than one search.

Our Primary Research Site is at:

https://research.maxwell.af.mil

Because some people may have difficulty accessing the ".mil" site at https://research.maxwell.af.mil, a copy of the AU Research Web is also available at:

http://research.airuniv.edu

In addition, a detailed AFIT Research Report is available at:

http://en.afit.edu/

Technical help for using either of these sites is available by calling DSN 493-5904 COM (334) 953-5904, or via e-mail to: research.support@maxwell.af.mil.